



Technical Standard Order

Subject: TSO-C16, AIRSPEED TUBES (ELECTRICALLY HEATED)

INTRODUCTION

Electrically heated airspeed tubes are in the class of aircraft components which the Administrator of Civil Aeronautics is authorized to approve in accordance with Parts 04a and 04b of the Civil Air Regulations.

This Technical Standard Order is intended to serve as a criterion by which the product manufacturer can obtain Civil Aeronautics Administration approval of his electrically heated airspeed tube.

In the establishment of this Technical Standard Order, consideration has been given to existing Government and industry standards for airspeed tubes for the purpose of adopting the performance requirements of one of the recognized aeronautical standards as the minimum safety requirements for airspeed tubes which are intended for use in civil aircraft. The specification of the Society of Automotive Engineers for electrically heated airspeed tubes contains such requirements.

DIRECTIVE

Provision. Pursuant to Sections 04a.07, 04a.530, 04b.05 and 04b.51 of the Civil Air Regulations, which authorize the Administrator to approve air-craft equipment, the performance requirements for airspeed tubes as set forth in Sections 5 and 6 of SAE Specification AS-393, Airspeed Tubes, Electrically Heated, dated December 1, 1947,* are hereby established as minimum safety requirements for electrically heated airspeed tubes which are intended for use in civil aircraft.

Application. Airspeed tubes complying with the specifications appearing in this Technical Standard Order are hereby approved for all aircraft. Airspeed tubes already approved by the Administrator may continue to be installed in aircraft

(1) for which an application for original type certificate is made prior to the effective date of this Order,

* Copies may be obtained from the Society of Automotive Engineers, 29 W. 39th St., New York, N. Y.

(2) the prototype of which is flown within one year after the effective date of this Order, and

(3) the prototype of which is not flown within one year after the effective date of this Order if due to causes beyond the applicant's control.

If a major change is made in the installation within nine months after the effective date of this Order involving a change in type or model of airspeed tube, previously approved types of airspeed tubes may be installed. However, in any such change made after the nine-month period, new types of airspeed tubes installed in aircraft used in instrument flight shall meet the specifications contained herein.

SPECIFIC INSTRUCTIONS

Marking. In addition to the identification information required in the referenced specification, each airspeed tube shall be permanently marked with the Technical Standard Order designation, CAA-TSO-C16 to identify the airspeed tube as meeting the requirements of this Order in accordance with the manufacturers' statement of conformance outlined below. This identification will be accepted by the Civil Aeronautics Administration as evidence that the established minimum safety requirements for airspeed tubes have been met.

Data Requirements. None.

Effective Date. After September 1, 1948, specifications contained in this Technical Standard Order will constitute the basis for Civil Aeronautics Administration approval of airspeed tubes for use in certificated aircraft used in instrument flight.

Deviations. Requests for deviation from, or waiver of, the requirements of this Order, which affect the basic airworthiness of the component, should be submitted for approval by the Director, Aircraft Service, Office of Aviation Safety, Civil Aeronautics Administration. These requests should be addressed to the nearest Regional Office of the Civil Aeronautics Administration, Attn.: Superintendent, Aircraft Branch.

Conformance. The manufacturer shall furnish to the CAA, Aircraft Service, A-298, Washington 25, D. C., a written statement of conformance signed by a responsible official of his company, setting forth that the airspeed tube to be produced by him meets the minimum safety requirements established in this Order. Immediately thereafter distribution of the airspeed tube conforming with the terms of this Order may be started and continued.

The prescribed identification on the airspeed tube does not relieve the aircraft manufacturer or owner of responsibility for the proper application of the airspeed tube in his aircraft, nor waive any of the requirements concerning type certification of the aircraft in accordance with existing Civil Air Regulations.

If complaints of nonconformance with the requirements of this Order are brought to the attention of the Civil Aeronautics Administration, and investigation indicates that such

complaints are justified, the Administrator will take appropriate action to restrict the use of the product involved.

Copies of this Technical Standard Order and other Technical Standard Orders may be obtained from the Civil Aeronautics Administration, Aviation Information Staff, Washington 25, D. C.

/S/ DELOS W. RENTZEL
Administrator of Civil Aeronautics